

In the preparation for a mastoid operation the head must be shaved for at least three inches upward and backward from the ear, even though the patient is a woman and protests most vigorously.

In preparing for throat and nose operations some surgeons spray with various antiseptics very vigorously and others make no preparations whatsoever.

Never go wrong from fear of being thought ignorant. If you are in doubt, ask. No surgeon worthy of the name would be guilty of a sneering or discourteous reply. Do not think because two surgeons manage their cases differently that one of them is wrong. They are probably both right, their difference being in their point of view.

In your general nursing there are a few things you should know how to do properly:

1. How to evert the eyelid properly.
2. How to syringe the ear properly.
3. How to examine a child's eye properly.

These three facts can be best elucidated by demonstration. Any remarks relative to care and protection of your own eyes while treating gonorrhœal ophthalmia would seem almost superfluous.

If you hope to be a surgical nurse of ability, learn well the names and uses of the various instruments employed.

HOME ECONOMICS

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XIII. SPECIAL FOODS—BREAD.

IF bread is no longer the staff of life, in the sense that it was before swift methods of transportation and the interchange of the products of different countries made possible the varied diet of the present day, it still has retained its place as the most important of any one food and the most universally used.

The history of the human race might almost be traced in the history of its bread-making. Even in prehistoric times meal was ground, mixed with water, and baked in the form of round cakes. The Egyptians and the Greeks knew not one kind, but a great variety of breads. One ancient Greek writer named sixty-two kinds of bread in use, while the excavations in Pompeii have revealed loaves of bread as well as the

ovens in which they were baked. In our own day we connect certain types of bread with different nations, as the black bread of Germany, the hard rye cakes of Northern Sweden, and the oat cakes of Scotland. But the bread familiar to most of us is that made of wheat flour raised with yeast. In some sections of our country salt-rising bread, made without yeast, is frequently used, and in England an attempt has been made to substitute so-called aerated bread for that made with yeast; yet yeast bread remains in general favor.

An ideal loaf of bread should fulfil certain conditions. It should be light and porous, so that the digestive juices may act upon it readily. It should be thoroughly baked, both in order to render the starch digestible and to insure the killing of all germs present in the dough. This necessitates the making of a small loaf instead of the large loaves so often prepared. It should be palatable, with the flavor of the wheat fully developed. A longer baking than is usually given, at a somewhat lower temperature than that ordinarily used, produces a sweet, nutty flavor that is very desirable. The ideal loaf should have a high food value—that is, it should retain as much as possible of the nutritive elements of the grain of which it is prepared. This is particularly necessary when bread forms the chief diet, as it often does with the very poor. Mr. Goodfellow in his investigations of the London poor found that in some districts fifteen per cent. of the children ate only bread for the twenty-one meals of the week, while forty per cent. more had other food only two or three times during the week.

It was for a long time supposed that graham flour and whole-wheat flour furnished a larger amount of nutriment than white flour, and one or the other of these breads has from time to time been urged upon us. It is certainly true that from the standpoint of chemical analysis whole-wheat flour is richer both in proteid and in mineral matter than white flour; but the chemical analysis of a food is often misleading. Late investigations in the agricultural experiment stations have shown that a much smaller proportion of the nitrogenous material from whole-wheat bread than from white bread is absorbed by the body, so that the amount of nutriment assimilated from the whole-wheat flour bread is no greater than that from white flour. The large particles of bran present in graham flour often prove irritating to the intestines and always hasten the progress of the food through the alimentary tract. Much of the graham flour now on the market is said to be a mixture of ordinary white flour with bran.

The wheats from which flour is made differ greatly in properties and chemical composition. We have winter wheat and spring wheat, according to the time in which the grain is planted, red and white

wheats, hard and soft. The soft wheats contain a larger proportion of starch and less proteid than the hard wheats. As a rule, the winter wheats are softer than the spring varieties. A very hard wheat grown in Southern Europe is used in the manufacture of macaroni, and lately successful attempts have been made to grow macaroni wheat in the northwestern sections of our own country. Most of the flour on the market is made from a mixture of different kinds of wheat, carefully adjusted so that a standard composition may be maintained. Each milling of wheat is tested, both by washing the gluten from a portion of the flour and weighing it, and by making sample loaves of bread and baking them. The softer wheats produce the flour that we call pastry flour, while flour containing a large proportion of gluten is better for bread.

The average composition of some different flours, according to the Atwater tables, is given below:

	Water, per cent.	Proteid, per cent.	Fat, per cent.	Carbo- hydrate, per cent.	Ash, per cent.	Fuel value, per pound, calories.
Entire wheat flour.....	12.1	14.2	1.9	70.6	1.2	1,660
Graham flour.....	11.8	13.7	2.2	70.3	2.0	1,655
Spring wheat flour.....	11.6	11.8	1.1	75.0	.5	1,660
Winter wheat flour.....	12.5	10.4	1.0	75.6	.5	1,640
Roller process flour.....	12.5	11.3	1.1	74.6	.5	1,645

A comparison of the composition of flour with that of bread made from the same flour is shown from the following analyses taken from Experiment Station Bulletin No. 67 of the Department of Agriculture.

	Water.	Proteid.	Fat.	Carbo- hydrate.	Ash.
White patent flour.....	12.36	12.43	1.62	73.08	.5
White bread from same flour...	32.8	8.87	3.53	54.18	.62

(To be continued.)

